

REMARKS

Status of the Claims

Claims 22-43 are pending, with Claims 22 and 33 being independent. Claims 1-22 have been canceled without prejudice in favor of new Claims 22-43. Claims 22-31 correspond to Claims 1-10 presented in the October 25, 2006 Amendment and Claims 33-42 correspond to Claims 11-21 presented in the October 25, 2006 Amendment.

Requested Action

Applicant respectfully requests the Examiner to reconsider and withdraw the outstanding rejections in view of the foregoing amendments and the following remarks.

Applicant also respectfully requests that this Amendment After Final be entered. This Amendment was not presented earlier as it was earnestly believed that the claims on file would be found allowable. Given the Examiner's familiarity with the application, Applicant believes that a full understanding and consideration of this Amendment would not require undue time or effort by the Examiner. Moreover, Applicant submits that this Amendment places the application in condition for allowance. Accordingly, entry of this Amendment is believed to be appropriate and such entry is respectfully requested.

Telephone Interview

Applicant gratefully acknowledges the courtesies extended by the Examiner during the telephone interview on February 7, 2007. In the course of the interview, independent Claims 1 and 11 were discussed with respect to rejection of these claims over the patent to Yoshimoto et

al. on the grounds of inherency. The undersigned pointed out that the test for inherency is that the claimed feature must necessarily be present in the reference, and that this test was not met at least for the claimed rotation-frequency-changing control circuit, and therefore, also for the claimed adjust circuit. In response, the Examiner requested that Applicant place his arguments on the record in a written response so that they can be given careful consideration.

Claim Objections

The Office Action notes that original Claims 11-21 presented in the May 2, 2006 Amendment are not identical to the original claims. In response, while not conceding the propriety of the objection, Claims 1-21 have been canceled without prejudice in favor of new Claims 22-31, which correspond to Claims 1-10 presented in the October 25, 2006 Amendment and Claims 33-42, which correspond to Claims 11-21 in the October 25, 2006 Amendment. In addition, Applicant has also added dependent claims 32 and 43 to recite additional novel features of the present invention.

Allowable Subject Matter

Applicant gratefully acknowledges the indication that Claims 7, 9, 10, 17, 19, and 20 contain allowable subject matter and would be allowed if redrafted in independent form including all of the limitations of the base claim and any intervening claims from which they depend. These claims correspond to new Claims 28, 30, 31, 39, 41, and 42, respectively. Applicant has not drafted new Claims 28, 30, 31, 39, 41, and 42 in independent form because the

independent claims from which they depend are believed to be allowable for the reasons discussed below.

Rejections

Claims 1-3, 8, 11-14, 18, and 21 are rejected under 35 U.S.C. § 102(e), as being anticipated by the patent to Yoshimoto et al. (U.S. Patent No. 5,251,194). Claims 4-6, 15, and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the patent to Yoshimoto et al. in view of the admitted art.

Response to Rejections

These rejections are respectfully traversed for the following reasons.

Independent Claims 22 and 33

Independent Claim 22 relates to an optical-disk-rotation-controlling optical information reproducing apparatus. The apparatus is for recording or reproducing information by controlling rotation of an optical disk so as to provide a constant linear velocity by changing a rotation frequency in accordance with a radial-direction position of an optical spot. The apparatus comprises a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof, a focusing servo control circuit and a tracking servo control circuit for the optical spot, and a circuit configured to adjust a servo-loop gain of tracking servo control in accordance with the change of the disk rotation frequency.

Independent Claim 33 is similar to Claim 22, except that it recites a circuit configured to adjust a servo-loop gain of focus servo control in accordance with the change of the disk rotation frequency.

In contrast, the patent to Yoshimoto et al. is not understood to relate to an optical-disk-rotation-controlling optical information reproducing apparatus that adjusts a servo-loop gain of tracking or focus servo control in accordance with a change in the disk frequency rotation, which is controlled by a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof, as recited by independent Claims 22 and 33.

The Office Action cites Figures 1 and 18, elements 46 and 72, and column 6 of this patent to show the claimed rotation control circuit for the disk. But these portions of the Yoshimoto et al. patent relate to optical-head-rotation control, not disk-rotation control:

- Figure 1 shows the circuitry for controlling the optical head 12, not the disk 10. Column 5, lines 52 and 53 of this patent explicitly states that the rotation circuitry of the disk 10 is not shown.
- Figure 18 also shows the circuitry for controlling the optical head 12, not the disk 10, such as elements 46 and 72, (“Like elements in FIGS. 1 and 18 have the same reference numerals.” (column 15, lines 46-48).
- Element 46 is a linear motor for the optical head 12 (column 6, lines 5-9).
- Element 72 is a linear motor drive circuit connected to the linear motor 46 (column 6, lines 23-34).
- Column 6 discusses the control of the optical head 12, not rotation control of the disk 10.

Thus, the patent is not understood to explicitly disclose the claimed circuit configured to control rotation of the optical disk by changing a rotation frequency thereof. Therefore, this

patent also is not understood to disclose or suggest a circuit configured to adjust a servo-loop gain of tracking or focus servo control in accordance with the change of the disk rotation frequency, as recited by Claims 22 and 33.

For this reason, page 3 of the Office Action appears to argue that these features are inherent because 1) the optical disk medium 10 is rotated, 2) a linear motor 46 provides coarse movement of the radial direction on a constant speed for an optical head that directs light to the optical disk medium 10, and 3) “the tracking signal varies in frequency during seeking in accordance with the optical head velocity”.

Since the Office Action is arguing the inherency of the claimed circuit configured to control rotation of the optical disk by changing a rotation frequency thereof, the Office is required to satisfy the requirement for establishing inherency under MPEP § 2112. This portion of the MPEP requires that the claimed feature *must* necessarily be present in the reference to support a conclusion of inherency:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" (emphasis in the original)

But, the Office Action has not established that a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof is necessarily present as a result of the existence of a conventional rotatable optical disk 10, a linear motor 46 for an optical head 12, and a frequency-varying tracking signal. Therefore, MPEP § 2112 prohibits a finding of the inherency of these features in the Yoshimoto et al. patent.

For these reasons, Applicant respectfully submits that independent Claims 22 and 33 are allowable over this patent.

New Dependent Claims 32 and 43

New dependent Claims 32 and 43 recite that the circuit configured to adjust a servo-loop gain of tracking or focus servo control adjusts the servo-loop gain of tracking or focus servo control in accordance with the change of the disk rotation frequency so that the servo-loop gain in an outer portion of the optical disk is higher than that in an inner portion of the optical disk. In contrast, the Yoshimoto et al. patent is not understood to disclose or suggest these features, and therefore, for this additional reason, these claims are allowable over this patent.

Remaining Dependent Claims

The remaining dependent claims, Claims 23-31 and 34-42 are allowable for the reasons given for the independent claims are recite features that are patentable in their own right. Individual consideration of the dependent claims is respectfully solicited.

Conclusion

In view of the above amendments and remarks, the application is now in allowable form and entry of this Amendment is considered proper. Therefore, early passage to issue is respectfully solicited.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

/Gary M. Jacobs/

Gary M. Jacobs
Attorney for Applicant
Registration No. 28,861

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3800
Facsimile: (212) 218-2200
GMJ:gbm

DC_MAIN 269259v1